

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently Amended) A method of providing automated document retention for an electronic document comprising:

(a) assigning a document retention policy to the electronic document, the document retention policy being ~~based on~~ derived from a recurring cut-off periodic-installment retention schedule specifying respective installment periods, each of the respective installment periods having a respective document retention duration and

(b) cryptographically associating the document retention policy with the electronic document.

2. (Currently Amended) The method as recited in claim 1, further comprising:

(c) cryptographically preventing access to the electronic document in accordance with the document retention policy when a the respective document retention ~~period~~ duration for the electronic document has been exceeded.

3. (Currently Amended) The method as recited in claim 1, wherein:

step (b) utilizes a cryptographic key to associate the document retention policy, and

the document retention policy specifies a the respective document retention ~~period~~ duration and ~~a cut-off~~ the respective installment period.

4. (Currently Amended) The method as recited in claim 3, wherein the document retention policy specifies a the respective document retention ~~period~~ duration that expires a predetermined period of time after a beginning of the respective ~~cut-off~~ installment period.

5. (Currently Amended) The method as recited in claim 3, wherein the respective ~~cut-off~~ installment period corresponds to a maximum off-line period of a client.

6. (Previously Presented) The method as recited in claim 1, wherein said associating comprises acquiring a cryptographic key from a server over a network, the cryptographic key being used to associate the document retention policy.

7. (Currently Amended) The method as recited in claim 6, further comprising:

(c) deactivating the cryptographic key when a the respective document retention ~~period~~ duration has expired, thereby preventing further access to the electronic document.

8. (Currently Amended) The method as recited in claim 7, wherein:

said associating operates to utilize a cryptographic key to associate the document retention policy, and

the document retention policy specifies a the respective document retention ~~period~~ duration and ~~a cut-off~~ the respective installment period.

9. (Currently Amended) The method as recited in claim 8, wherein the document retention policy specifies a the respective document retention ~~period~~ duration that expires a predetermined period of time after a beginning of the cut-off respective installment period.

10. (Currently Amended) A method comprising:

determining whether ~~a cut-off~~ an installment period for a document retention key has ~~been reached~~ elapsed;

generating a next document retention key to be used to encrypt an electronic document during a next ~~cut-off~~ installment period, the next document retention key having a document retention ~~period~~ duration associated therewith; and

notifying a client of the next document retention key.

11. (Previously Presented) The method as recited in claim 10, further comprising:

deactivating the prior document retention key when the prior document retention key is to be deactivated.

12. (Currently Amended) The method as recited in claim 11, wherein the document retention ~~period~~ duration is a predetermined duration of time following a the beginning end of the next ~~cut-off installment~~ period.

13. (Currently Amended) A method for restricting access to an electronic document, said method comprising:

encrypting a data portion of an electronic document using a document key to produce an encrypted data portion;

using a retention access key to associate a document retention policy with the electronic document;

encrypting the document key using the retention access key to produce an encrypted document key, the retention access key being usable for said encrypting during ~~a cut-off an installment~~ period of a ~~recurring cut-off~~ periodic-installment retention schedule;

forming a secured electronic document from at least the encrypted data portion and the encrypted document key; and

storing the secured electronic document.

14. (Previously Presented) The method as recited in claim 13, wherein the retention access key is a public retention access key.

15. (Currently Amended) The method as recited in claim 13, wherein the document retention policy specifies a document retention ~~period~~ duration that expires a predetermined period of time after a beginning of the ~~cut-off~~ installment period.

16. (Currently Amended) A method for accessing a secured electronic document, the secured electronic document having at least a header portion and a data portion, comprising:

obtaining a retention access key, the retention access key being used to associate a respective document retention ~~period~~ duration of a document retention policy with the electronic document, the retention access key being usable during the respective document retention ~~period~~ duration following a beginning of a ~~cut-off~~ a respective installment period of a ~~recurring cut-off~~ periodic-installment retention schedule;

obtaining an encrypted document key from the header portion of the secured electronic document;

decrypting the encrypted document key using the retention access key to produce a document key; and

decrypting an encrypted data portion of the secured electronic document using the document key to produce a data portion.

17. (Previously Presented) The method as recited in claim 16, wherein the retention access key is identified by an indicator within a header portion of the secured electronic document.

18. (Previously Presented) The method as recited in claim 16, wherein the retention access key is a private retention access key.

19. (Previously Presented) The method as recited in claim 16, wherein said obtaining obtains the retention access key being obtained from a server.

20. (Currently Amended) The method as recited in claim 16, wherein the respective document retention period duration is a predetermined period of time ~~after the~~ occurrence following a beginning of the ~~cut-off~~ respective installment period.

21. (Currently Amended) A computer readable medium including at least computer program code for providing document retention for an electronic document, said computer readable medium comprising:

computer program code for assigning a document retention policy to the electronic document, the document retention policy being ~~based on~~ derived from a ~~recurring cut-off periodic-installment~~ retention schedule; and

computer program code for cryptographically associating the document retention policy with the electronic document.

22. (Currently Amended) The computer readable medium as recited in claim 21, wherein said computer readable medium further comprises:

computer program code for cryptographically preventing access to the electronic document in accordance with the document retention policy when a document retention ~~period~~ duration for the electronic document has been exceeded.

23. (Currently Amended) The computer readable medium as recited in claim 21,

wherein said computer program code for cryptographically ~~asseeiates~~ associating operates to utilize a cryptographic key to associate the document retention policy, and

wherein the document retention policy specifies a respective document retention ~~period~~ duration and a ~~cut-off~~ respective installment period.

24. (Currently Amended) The computer readable medium as recited in claim 23, wherein the document retention policy specifies a the respective document retention ~~period~~ duration that expires a predetermined period of time after a beginning of the ~~cut-off~~ respective installment period.

25. (Currently Amended) A file security system for restricting access to an electronic file, comprising:

a key store that stores a plurality of cryptographic key pairs, each of the cryptographic key pairs including a public key and a private key, at least one of the cryptographic key pairs pertaining to a retention policy, the retention policy having a respective document retention ~~period~~ duration and a ~~cut-off~~ respective installment period; and

an access manager operatively connected to said key store, said access manager configured to make available, for each of the ~~out-off~~ respective installment periods, a different one of the public keys of the at least one of the cryptographic key pairs, and to determine whether the private key of the at least one of the cryptographic key pairs pertaining to the retention policy is permitted to be provided to a requestor based on whether the respective document retention ~~period~~ duration following a beginning of the ~~out-off~~ respective installment period has expired,

wherein the requestor requires the private key of the at least one of the cryptographic key pairs pertaining to the retention policy to access a secured electronic file, and wherein the secured electronic file was previously secured using the public key of the at least one of the cryptographic key pairs pertaining to the retention policy, and at the time the electronic file was so secured, the public key was within the ~~out-off~~ respective installment period and available for use.

26. (New) The method as recited in claim 13, wherein access is restricted to the secured electronic document stored to a remote location.